

REMARKS

Claims 25, 33-37 and 39-62 were pending before this amendment. Claims 25, 33-37 and 45-49 have been withdrawn as being drawn to non-elected inventions. Claims 39-44, 50-54 and 61-62 are cancelled herewith. Claims 55 and 56 have been amended. No new matter has been added by these amendments. For example, Figs. 6 and 7 show embodiments in which an elastomeric element has a radiused terminal end to contact one or more teeth.

Claims 55-60 are in the case.

Applicants respectfully submit that the claims are in condition for immediate allowance, which is respectfully requested.

Regarding the priority chain in the Preliminary Amendment of October 24, 2003, an amended paragraph is submitted herewith to update that U.S. application serial no. 09/660,151, filed September 13, 2000, is now abandoned, and that U.S. application serial no. 08/730,286, filed November 30, 1996, now U.S. Pat. No. 5,987,688, is a continuation-in-part of 08/554,931, filed November 9, 1995. The status of all applications identified by serial no. is up-to-date.

Claims 55-60 and 62 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,151,745. A terminal disclaimer is filed herewith to obviate this ground of rejection.

As amended, claim 55 features an oral brush that includes an elongated handle, a head portion, sized for insertion into the human mouth, extending from an end of said handle and a brush portion. The brush portion includes one or more elastomeric element(s) extending from the head portion to a radiused terminal end to contact one or more teeth. The elastomeric element(s) include a thermoplastic elastomer which is a styrenic block copolymer, a styrene-ethylene-butylene-styrene block copolymer, a styrene-butadiene-styrene block copolymer, a styrene-isoprene-styrene block copolymer, a polyolefin elastomer, or a mixture of any two or more of the elastomers. In addition, the head portion includes a plurality of bristles that include a non-elastomeric material. The elastomeric element(s) extend(s) upwardly from said head portion in substantially the same direction as at least some of the non-elastomeric bristles.

Applicants have found that consumers generally prefer toothbrushes that have relatively small heads, and that provide effective gum-massage without irritation. Having an elastomeric

element that extends upwardly from the head portion in substantially the same direction as at least some of the non-elastomeric bristles enables construction of a relatively small head. The use of an elastomeric element having a radiused terminal end enables desirable gum-massage, without excessive irritation.

Claims 50-53, 55, 57 and 62 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Birch, U.S. patent No. 3,103,027, in view of Michaels, U.S. Patent No. 5,040,260.

Birch teaches, "a pointed elastic member for massaging the gingival tips of the gums and cleaning between the teeth." (col. 1, lines 13-14)

Michaels teaches a toothbrush head that includes a plurality of integral projections extending outwardly from the head. In Michaels' toothbrush head, all of the projections are non-radiused, and are made of a thermoplastic elastomer material. Thus, Michaels would have provided no suggestion to make an elastomeric element that extends from the head portion to a radiused terminal end to contact one or more teeth. As a result, combining the teachings of Michaels with those of Birch would not have resulted in Applicants' invention as now claimed. Therefore, claim 55 and all dependent claims are in condition for allowance.

Claims 58-60 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Birch, U.S. patent No. 3,103,027, in view of Michaels, U.S. Patent No. 5,040,260, and further in view of Muhler, U.S. Patent No. 3,613,143.

Muhler teaches incorporating "an abrasive material in the plastic from which the bristles are formed" (col. 1, lines 13-14). Muhler would have provided no suggestion to make an elastomeric element that extends from the head portion to a radiused terminal end to contact one or more teeth. Combining Muhler with teachings of Birch and Michaels would not have resulted in Applicants' invention as now claimed. For at least these reasons, claims 58-60 are in condition for allowance.

Claim 54 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Moskovich, U.S. Patent No. 5,628,082 in view of Michaels, U.S. Patent No. 5,040,260. This rejection has been obviated by cancellation of the claim.

Claims 55 and 56 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Pavone, U.S. Patent No. 5,325,560 in view of Modic, U.S. Patent No. 5,723,543.

Pavone teaches two types of elastomeric elements that are useful for an orthodontic toothbrush. Neither of these elements is disposed to contact one or more teeth. The first element is "flexible member 26" (col. 2, line 61) that is disposed underneath the central bristles. Pavone states that "this flexible member 26 serves as an air pocket" (col. 3, lines 1-2). This first flexible member, because it is disposed at the base of the bristles, is not capable of contacting one or more teeth as now recited in claim 55. The second element taught by Pavone is "bumper 38" (col. 3, line 29). Bumper 38 is positioned along the side of the toothbrush head, and thus, like flexible member 26, it is not capable of contacting the teeth. Furthermore, neither flexible member 26 or bumper 38 extends upwardly from the head portion in substantially the same direction as at least some of the non-elastomeric bristles. Thus, Pavone does not teach or suggest the Applicants' claimed toothbrush.

Modic teaches a new thermoplastic elastomer composition. Potential uses include "automotive instrument panels, knobs, buttons, pen/pencils grips, cellular phones, toothbrushes, handles and tool grips" (col. 4, lines 25-27). Modic does not describe where or how the thermoplastic elastomer compositions would be used on a toothbrush, and thus does not supply what is lacking in Pavone.

Combining Modic with Pavone will at most produce an orthodontic toothbrush with flexible members that, due to their disposition, are incapable contacting the teeth. Furthermore, such members would not extend upwardly from the head portion in substantially the same direction as at least some of the non-elastomeric bristles. For at least these reasons, claims 55 and 56 are in condition for allowance.

Claims 39, 41-44 and 61 have been rejected under 35 U.S.C. 103(a) as being unpatentable over JP 61-090877. This rejection has been obviated by cancellation of these claims.

Claims 39-44 and 61 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Vallis, U.S. Patent No. 3,128,487 in view of JP 61-090877. This rejection has been obviated by cancellation of these claims.

Claims 39, 41-44 and 61 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Muhler, U.S. Patent No. 3,613,143 in view of Scheetz, U.S. Patent No. 4,391,951. This rejection has been obviated by cancellation of these claims.

Applicant : Michael F. Roberts et al.
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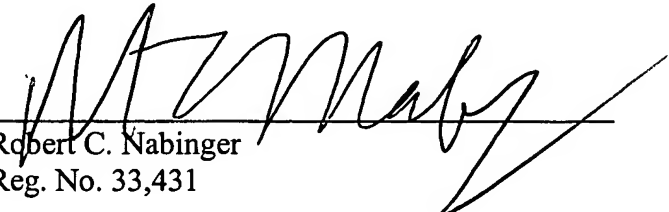
Claim 39 and 40 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Michaels, U.S. Patent No. 5,040,260 in view of Zukosky, U.S. Patent No. 4,525,531. This rejection has been obviated by cancellation of these claims.

Applicants respectfully submit that the claims are in condition for immediate allowance, which is respectfully requested.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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Robert C. Nabinger
Reg. No. 33,431

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

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